CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Kennecott Exploration Road Use
Proposed Implementation Date:	July, 2019
Proponent:	Kennecott Exploration Company
Location:	Section 36, Township 7 South, Range 11 West (Common Schools Trust)
County:	Beaverhead County

I. TYPE AND PURPOSE OF ACTION

Kennecott Exploration Company has applied for a Land Use License to use an existing road on State land in Section 36, T7S, R11W in Beaverhead County to access unpatented mining claims on BLM lands on sections 2,10,11, and 12 T7S, R11W to do mining exploration. The road would need minor maintenance and repair before use to removed rutted sections and improve drainage features in the road. Expected use would start in late July and be completed by October 31, 2019

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

MT DNRC Archeologist, Patrick Rennie
FWP Wildlife Biologist, Craig Fager
Beaverhead County Commissioners
Lessee, Harrington Company
BLM Field Office in Dillon MT Geologist, Steve Lubinski
NRIS Search

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Montana Sage Grouse Conservation Program. Proponent has applied for permission to drill in Sage Grouse core habitat.

Montana DEQ, Hard Rock Mining Bureau

3. ALTERNATIVES CONSIDERED:

Action Alternative: Issue Kennecott Exploration Company a Land Use License (LUL) to use an existing road on state land for ingress and egress to perform mining exploration work on BLM unpatented mining claims.

No Action Alternative: Deny Kennecott Exploration Company a Land Use License (LUL) to use an existing road on state land for ingress and egress to perform mining exploration work on BLM unpatented mining claims.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:
Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

There are two main soil types found in the area where the existing road crosses through section 36, T7S R11W.

The first being, Madigan-Dalys-Nieman complex, 15 to 35% slopes. This soil type is well drained and is derived from a parent material of Colluvium over residuum weathered from andesite. The soils are a mixture of gravelly sandy loam and clay loam. Although these soils are well drained, they will rut during saturated periods of the year especially in the spring. They have a land capability classification of 7s.

The second soil type is Maciver, very stoney-Philipsburg-Tibson, very stony complex, 8 to 35 percent slopes. These soils are derived from a parent material of colluvium. The soils are a mixture of very cobbly loam and very gravelly clay loam. These soils are also well drained and can be rutted damage if driven on when they ae saturated.

Action Alternative: This alternative would allow the use of the existing road by the proponent for ingress and egress purposes to access BLM lands for mining exploration purposes. The road use could cause minor road damage, rutting if used when the soils are saturated. In the application the proponent has requested that they be allowed to do minor blading and drainage improvement of the road prior to use. As a mitigation measure a final blading may also be required if rutting or damage to the road occurs during the exploration operation.

No Action Alternative: Under this alternative no additional rutting of the road would occur from the planned exploration activity. The road however would remain in its current rutted condition.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:
Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

The proposed road use is not near any streams or waterways and neither of the proposed alternatives will cause degradation to water quality, or cause changes to ambient water quality standards of the Beaverhead River drainage.

6. AIR QUALITY:
What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Action Alternative: Use of the road during the dry summer months will cause dust particulates to be dispersed into the air causing a slight impact to air quality in the surrounding area. The area of use is far from any population center and is not in a Class 1 airshed or a non-attainment zone. No cumulative effects to ambient air quality standards would be anticipated from this alternative.

No Action Alternative: No changes to air quality standards would occur under this alternative.

7. VEGETATION COVER, QUANTITY AND QUALITY:
What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Existing native grassland species near the road side include big sagebrush, Idaho fescue, bluebunch wheatgrass, slender wheatgrass and basin wildrye. There is some scattered invasive cheatgrass present, but no noxious weeds were observed on site during a field visit on 7/20/19.

A search of the Montana Natural Heritage Program database revealed that there were 4 plants of concern that have been documented on section 36 and 31 aqnd in the surrounding area. They include Astragalus scaphoides (Bitterroot Milkvetch), Astragalus terminalis (Railhead Milkvetch) Lomatium attenuatum (Taper-tip desert-parsley, and Delphinium bicolor (Limestone Larkspur)

Action Alternative: Some minor road maintenance work will need to be done on the existing road including grading, and smoothing out the ruts in the road, and installing drainage features like rolling dips and leadoff ditches. This work will cause some minor disturbance to native vegetation. None of the 4 rare plants listed above were identified in or near the roadway curing my field visit. No long term or cumulative effects would be anticipated to vegetative cover type under this alternative.

No Action Alternative: No changes to vegetative cover would occur under this alternative.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Action Alternative: A variety of big game, small mammals, reptiles, raptors, upland game birds and songbirds use this area and activities from the proposed project could temporarily disrupt wildlife movement and patterns. However, proposed activities are on an existing, open road, and as such the area likely doesn't receive extensive use by many of the wildlife species more sensitive to human disturbance. The FWP biologist commented that the area is big game winter range for elk and deer, but that he wasn't concerned that it would conflict with elk and deer use because of the season that the action would occur, July through October.

No Action Alternative: No changes to terrestrial, avian and aquatic species or their habitats would be affected under this alternative.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:
Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

A search was conducted using the Montana Natural Heritage Program database to identify point observations of species of concern in the section of the proposed activity. The following species of concern have been documented in section 16 and the surrounding area: Ferruginous Hawk (Buteo regalis), Pygmy Rabbit (*Brachylagus idahoensis*), and Greater Sage-Grouse (*Centrocercus urophasianus*).

The proposal is located within the Greater Sage-Grouse core habitat area boundaries defined by the Executive Order (EO) for the implementation of the Montana Sage Grouse Conservation Strategy. This project is currently being evaluated by the Montana Sage Grouse Habitat Conservation Program and is waiting for approval from the Program before being allowed to proceed under the action alternative. There is an active lek identified within ½ mile of the existing road that will be used for this proposal.

Action Alternative: This alternative will need permission from the Sage Grouse Conservation Program to proceed with the proposed activity of using the existing road. Because of the active lek within ½ mile of the road restrictions of use will include no activity on the road from early April through July 15 of each year. If mitigation measures from the program are followed no long term or cumulative effects would be anticipated to any of the species of concern listed above.

No Action Alternative: No impacts to species of concern would occur under this alternative.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

Action Alternative: MT DNRC Archaeologist, Patrick Rennie was consulted regarding the nature of the proposed action and the potential to impact historical and archaeological resources; there were no documented cultural resource concerns associated with the proposed project.

No Action Alternative: There are no cultural resource concerns associated with this alternative.

11. AESTHETICS:
Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Neither of the proposed alternatives will impact the aesthetics of the surrounding area.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:
Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

Neither of the proposed alternatives should have effects on environmental resources of land, water, air or energy.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:
List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

The BLM has completed NEPA work pertaining to this proposal and the MT DEQ is in charge of the stipulations required for reclamation work associated with any drilling and exploration work done on the unpatented mining claims.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

Action Alternative: The amount of traffic using the road will increase for the three months that the drilling exploration work will take place. The road will also have increased traffic during the hunting season. The increase in use could possible cause a health and safety concern for the public. Mitigation measures can include signing the road, so the public knows that mining traffic will be on the road.

No Action Alternative: No changes to human health and safety will occur under this alternative.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

Neither of the proposed alternatives will impact industrial, commercial or agricultural activities or production.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

Action Alternative: This alternative will create job opportunities for miners for a three-month period, August through October.

No Action Alternative: This alternative will not create, move, or eliminate jobs.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Neither of the alternatives will increase or decrease local or state tax revenue.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.

Action Alternative: This alternative will increase traffic on a low standard, dirt, 14-foot road over state and BLM land, however there should be no additional demand for government services because of the road use.

No Action Alternative: There will be no increase in demand for government services under this alternative.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

No known zoning or management plans exist for this area.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Neither of the proposed alternatives will change access or quality of recreational activities in the surrounding area.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

Neither of the proposed alternatives will affect the density and distribution of population and housing in the surrounding area.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

Neither of the proposed alternatives will affect social structures and mores or traditional lifestyles in the surrounding area.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

Neither of the proposed alternatives will affect the cultural uniqueness and diversity of the surrounding area.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Action Alternative: This alternative will generate $400 for the Common Schools Trust and will allow the existing road to be maintained.

No Action Alternative: This alternative will generate no money for the Common Schools Trust and no road maintenance will occur.

EA Checklist Prepared By:	**Name:**	Timothy Egan	**Date:**	7/24/19
	Title:	Dillon Unit Manager		

V. FINDING

25. ALTERNATIVE SELECTED:

Action Alternative: Issue Kennecott Exploration Company a Land Use License (LUL) to use an existing road on state land for ingress and egress to perform mining exploration work on BLM unpatented mining claims.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Under the Action alternative the Kennecott Exploration Company will be required to fix the road prior to use and do a final blading when the work is done to improve drainage features in the road and bring the road up to BMP standards. They will also be required to sign the roads to let the public know that there will be heavy trucks using the road and an increase in traffic use of.

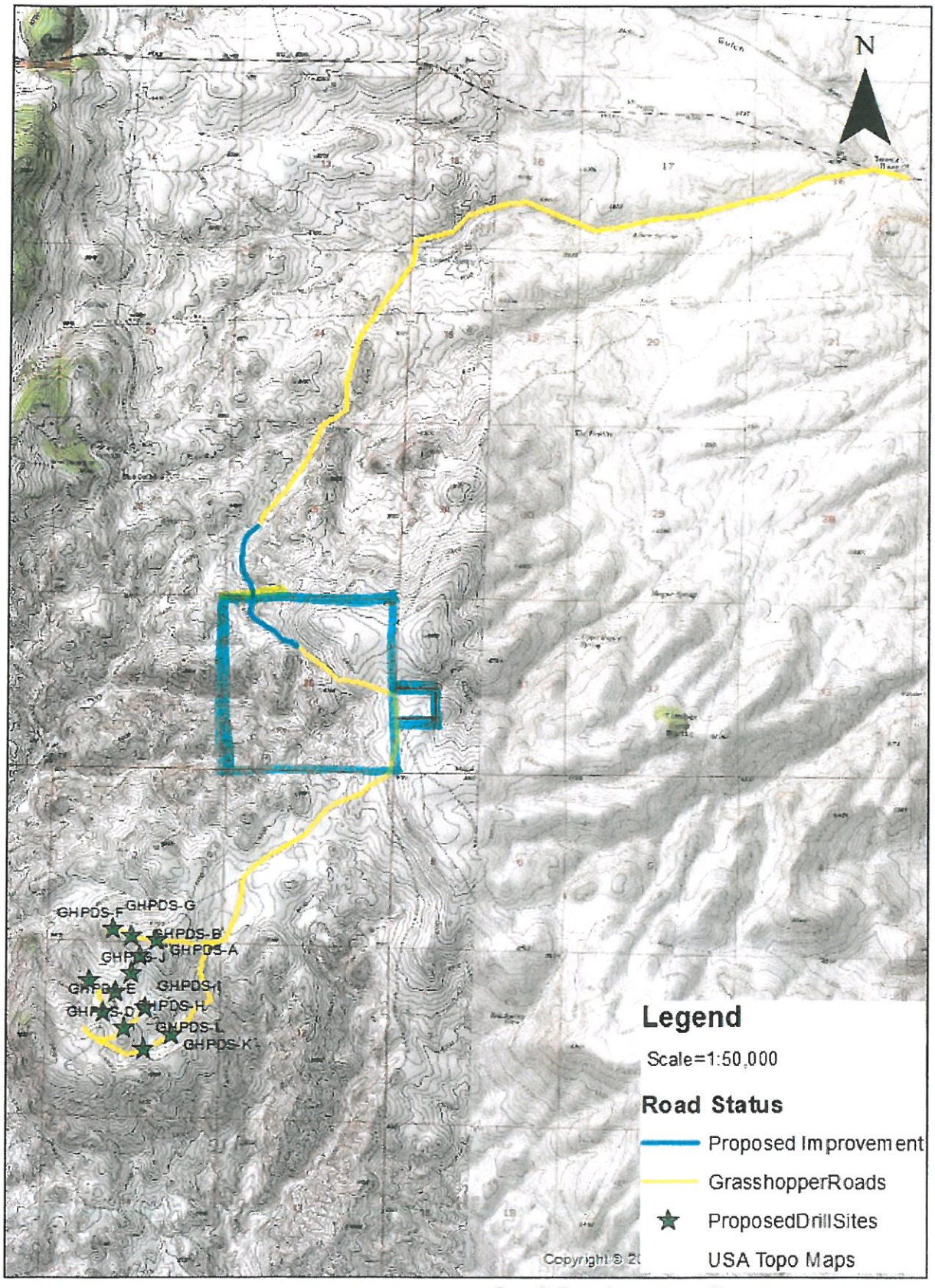
Kennecott Exploration Co. will also be required to follow all stipulations prescribed by the Montana Sage Grouse Conservation Program including controlling invasive grasses and noxious weed infestations.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

☐	EIS	☐	More Detailed EA	X	No Further Analysis

EA Checklist Approved By:	**Name:**	Andy Burgoyne
	Title:	Trust Land Program Manager, Central Land Office
Signature:		**Date:** 7/30/19

Proposed Road Improvement Location along Grasshopper Creek Road



Sec 36 T7S - R11W, Sec 31, T7S R10W